

REMARKS

This Amendment responds to the Office Action mailed January 21, 2009 in the above-identified application. Based on the foregoing amendments and the following comments, careful reconsideration and allowance of the application are respectfully requested.

Claims 1-19 were previously pending in the application. By this Amendment, claims 1 and 16 have been amended. New claim 20 has been added. Accordingly, claims 1-20 are currently pending, with claims 1 and 20 being independent claims. The amendment to claim 1 finds clear support in the original application at least at page 2, second paragraph, of the English translation. No new matter has been added.

The Examiner has rejected claims 1-19 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner asserts that claims 1 and 16 recite a broad limitation together with a narrow limitation. While Applicants do not concur with the rejection, claims 1 and 16 have been amended. Amended claim 1 recites a device for detecting the parameters of an aerosol, in an inhalation therapy device. Amended claim 16 recites that the radiation emitted by the transmitting means is infrared light. The amended claims are in full compliance with 35 U.S.C. 112, second paragraph, and withdrawal of the rejection is respectfully requested.

The Examiner has rejected claims 3-4 and 6-13 under 35 U.S.C. 103(a) as unpatentable over Sommer et al. (WO 01/85241) in view of Danby et al. (US 5,680,111). Based on the discussion in the Office Action, it is assumed that the rejection of claims 1-19 was intended. It is noted that Sommer et al. is a counterpart of DE 100 22 795 A, discussed in the subject application. The rejection is respectfully traversed for the following reasons.

Sommer discloses a breath-controlled inhalation therapy device in which an infrared light transmitter is disposed adjacent to an infrared light receiver in an opening in the mouthpiece of the therapy device (Figs. 1-3). The infrared light emitted by the transmitter arrives in a detection area in

which an aerosol is located. The infrared light is reflected by particles or droplets of the aerosol and arrives at the receiver, which emits an output signal that corresponds to the density of the aerosol.

Danby discloses a device for detection of air or air bubbles in transparent or translucent tubing carrying a fluid (Abstract). As shown in FIG. 3 of Danby, tubing 14 carries a fluid (column 4, lines 47-57). The sensor includes an infrared transmitter 21 (column 4, line 34) and sensors 20a and 20b. A transparent optical spacer 15 holds tubing 14 (column 4, line 58 to column 5, line 6).

Amended claim 1 is directed to a device for detecting the parameters on aerosol, in inhalation therapy device, comprising a transmitting means which is disposed on a body that at least partially surrounds an aerosol resting area and which emits radiation into the aerosol resting area through a translucent material, wherein droplets from the aerosol adhere to the body in an area through which the radiation is transmitted from the transmitting means into the aerosol resting area, a first receiving means which is disposed on the body that at least partially surrounds the aerosol resting area, which is disposed in relation to the transmitting means so as to primarily receive transmission radiation, and which emits a first analysis signal that corresponds to the intensity of the received transmission radiation, a second receiving means which is disposed on the body that at least partially surrounds the aerosol resting area, which is disposed in relation to the transmitting means so as to primarily receive scattered radiation, and which emits a second analysis signal that corresponds to the intensity of the received scattered radiation, and a control means, to which the first and second output signals are supplied in which analyzes the first and second output signals in order to determine the parameters of an aerosol in the aerosol resting area. .

The Examiner concedes that Sommer lacks the second receiving means disposed on the body that at least partially surrounds the aerosol resting area, which is disposed in relation to the transmitting means so as to primarily receive scattered radiation and which emits a second analysis signal that corresponds to the intensity of the received scattered radiation. However, the Examiner relies upon Danby for teaching this limitation.

As an initial matter, Applicant contends that Sommer also lacks a first receiving means which is disposed in relation to the transmitting means so as to primarily receive *transmission*

radiation. Instead, Sommer discloses a receiver which is positioned to receive *reflected* radiation. Further, Sommer does not disclose or suggest a transmitting means which emits radiation into the aerosol resting area through a *translucent* material, as claimed.

Danby teaches a sensor including a light transmitter, a first light receiver positioned to receive transmitted radiation and a second receiver positioned to receive scattered light. However, Danby relates to detection of air or air bubbles in a fluid carried by tubing 14. Thus, Danby is unrelated to the problem of detecting an aerosol, as recited in amended claim 1, wherein droplets from the aerosol adhere to the body in an area through which the radiation is transmitted from the transmitting means into the aerosol resting area. A liquid containing air bubbles is very different from an aerosol wherein droplets or particles are dispersed in a gas such as air. Applicants discovered that use of a translucent material for transmission of radiation into the aerosol resting area provides enhanced performance in comparison with prior art arrangements wherein radiation is transmitted through a transparent material. Danby contains no teaching of a solution to this problem. In particular, Danby teaches a sensor for air bubbles in a liquid and appears to suggest that transparent tubing and translucent tubing are interchangeable. Thus, the skilled person would not be led to the device for detecting parameters of an aerosol as defined by amended claim 1. For at least these reasons, amended claim 1 is clearly and patentably distinguished over Sommer in view of Danby, and withdrawal of the rejection is respectfully requested.

Claims 2-19 depend from claim 1 and are patentable over the cited references for at least the same reasons as claim 1.

New claim 20 has been added to provide additional coverage of Applicants' contribution to the art. As should be apparent from the above discussion, new claim 20 is clearly and patentably distinguished over Sommer in view of Danby.

Based upon the above discussion, claims 1-20 are in condition for allowance.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, the Director is hereby authorized to charge any deficiency or credit any overpayment in the fees filed, asserted to be filed, or which should have been filed herewith to our Deposit Account No. 23/2825, under Docket No. P0777.70001US00.

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Respectfully submitted,

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